FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - RENEWAL

PERMITTEE

Imageworks Manufacturing, Inc.

Attn: Mark A. Meyer

49 South Street

Park Forest, Illinois 60466

<u>Application No.</u>: 74030060 <u>I.D.</u> No.: 031111AAU

Applicant's Designation: SCREEN Date Received: July 28, 2005

Subject: Lithographic and Silk Screen Printing

Date Issued: Expiration Date:

Location: 49 South Street, Park Forest

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of silk screen and lithographic printing, and coating operations pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued:
 - i. To limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year of volatile organic material (VOM), 25 tons/year of combined hazardous air pollutants (HAPs), or 10 tons/year of any single HAP). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
 - ii. To limit the emissions of VOM from the source to less than 25 tons/year. As a result, the source is excluded from the requirements of 35 Ill. Adm. Code Part 205, Emission Reduction Market System. The maximum emissions of this source, as limited by the conditions of this permit are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits issued for this location.
- 2a. This permit is issued based on emissions of volatile organic material from each emission unit not exceeding 8 lb/hour pursuant to 35 Ill. Adm. Code 218.301.
- b. This permit is also issued based on emissions of VOM from all coating operations not exceeding 15 lb/day pursuant to 35 Ill. Adm. Code 218.208(a).

- 3a. This permit is issued based upon the lithographic printing press being exempt from the requirements of 35 Ill. Adm. Code Part 218, Subpart H: Printing and Publishing, Section 218.407: Emission and Control Requirements for Lithographic Printing Lines on and After March 15, 1996. This is consequence of the combined daily emission rate of volatile organic materials (VOM) from subject presses never exceeding an applicability threshold of 100 lb/day (including solvents used for cleanup operations associated with the lithographic printing line(s)) established by Section 218.405(d)(2) and determined in accordance with Section 218.411(a)(1)(B).
- b. Pursuant to 35 Ill. Adm. Code 218.405(d)(2), the combined emissions of VOM from all lithographic printing line(s) at the source (including solvents used for cleanup operations associated with the lithographic printing line(s)) shall never exceed 100 lbs/day, as determined in accordance with Section 218.411(a)(1)(B), before the application of capture systems and control devices.
- c. Compliance with the daily limit shall be determined by calculations which demonstrate that combined emissions of VOM from all lithographic printing lines (including inks, fountain solutions, and solvents used for cleanup operations associated with the lithographic printing lines) at the source never exceed 100 lbs/day before the use of capture systems and control devices, as follows:
 - i. To calculate daily emissions of VOM, the owner or operator shall determine the monthly emissions of VOM from all lithographic printing lines at the source (including solvents used for cleanup operations associated with the lithographic printing lines) and divide this amount by the number of days during that calendar month that printing lines at the source were in operation;
 - ii. To determine the VOM content of the inks, fountain solution additives and cleaning solvents, the test methods and procedures set forth in 35 Ill. Adm. Code Section 218.409(c) shall be used. Pursuant to 35 Ill. Adm. Code 218.409(c), the Permittee may use the manufacturer's specifications for VOM content for fountain solution additives, cleaning solvents, and inks to demonstrate compliance with Condition 3(a) above, only if the manufacturer's specifications are based on results of tests of the VOM content conducted in accordance with methods specified in 35 Ill. Adm. Code 218.105(a);
 - iii. To determine VOM emissions from inks used on lithographic printing line(s) at the source, an ink emission adjustment factor of 0.05 shall be used in calculating emissions from all non-heatset inks, and a factor of 0.80 shall be used in calculating emissions from all heatset inks to account for VOM retention in the substrate. The VOM content of the ink, as used, shall be multiplied by this factor to determine the amount of VOM emissions from the use of ink on the printing line(s); and

- iv. To determine VOM emissions from fountain solutions and cleaning solvents used on lithographic printing line(s) at the source, no retention factor is used.
- 4a. This permit is issued based on all cleaning operations being performed by hand wiping with rags.
- b. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the equipment covered under this permit such that the equipment be kept in proper working condition and not cause a violation of the Environmental Protection Act or regulations promulgated therein.
- 5a. Usage of raw materials and VOM emissions from all printing, coating, and cleaning operations shall not exceed the following limits:

VOM Usage and Emissions
(Tons/Month)

3.6

(Tons/Year)

These limits are based on the maximum production capacity and usage of a wide variety of raw materials with maximum VOM content, and all VOM emitted. Compliance with annual limits shall be determined on a running total of 12 months of data.

- b. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish in rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.
- c. In the event that the operation of this emission unit results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.
- 6a. Within 90 days of a written request from the Illinois EPA the Permittee shall submit data on the volatile organic material content of the representative inks as applied determined by laboratory analysis in accordance with 35 Ill. Adm. Code Section 218.105.
- b. The submitted data shall include: The VOM content of the inks, a justification of why these are representative, and a description of the sampling procedures, and documentation for the analysis.

- c. The Illinois EPA may provide additional time for the performance of this testing upon request from the Permittee which shows that it is not feasible to perform representative testing within 90 days.
- 7a. Pursuant to 35 Ill. Adm. Code 218.411(a)(2) the Permittee shall collect and record either the information specified in (b) or (c) below for all lithographic printing lines at the source.
- b. Standard recordkeeping, including the following:
 - i. The name and identification of each fountain solution additives, lithographic ink, varnish, and cleanup solvent used on any lithographic printing lines, recorded each month;
 - ii. Daily records which show whether a lithographic printing line at the source was in operation on that day;
 - iii. The VOM content and the amount of each fountain solution additive, lithographic ink, varnish, cleaning solvent used on any lithographic printing line, recorded each month (lb/month or gallons/month);
 - iv. The total VOM emissions at the source each month, determined as the sum of the product of usage and VOM content for each fountain solution additive, cleaning solvent, varnish, and lithographic ink (with the applicable ink VOM emission adjustment) used at the source, calculated each month; and
 - v. The VOM emissions in lbs/day for the month, calculated in accordance with 35 Ill. Adm. Code 218.411(a)(1)(B) and Special Condition 3(b).
- c. Purchase and inventory recordkeeping, including the following:
 - i. The name, identification, and VOM content of each fountain solution additive, lithographic ink, varnish, and cleaning solvent used on any lithographic printing line, recorded each month;
 - ii. Inventory records from the beginning and end of each month indicating the total volume of each fountain solution additive, lithographic ink, varnish, and cleaning solvent used on any lithographic printing line at the source;
 - iii. Monthly purchase records for each fountain solution additive, lithographic ink, varnish, and cleaning solvent used on any lithographic printing line at the source;
 - iv. A daily record which shows whether a lithographic printing line at the source was in operation on that day;

- v. The total VOM emissions at the source each month, determined as the sum of the product of usage and VOM content for each fountain solution additive, cleaning solvent, varnish, and lithographic ink (with the applicable ink VOM emission adjustment) used at the source, calculated each month based on the monthly inventory and purchase records required to be maintained pursuant to 35 Ill. Adm. Code 218.411(a)(2)(B)(i), (a)(2)(B)(ii), and (a)(2)(B)(iii) and Special Conditions 3(c)(i), (c)(iii), and (c)(iii); and
- vi. The VOM emissions in lbs/day for the month, calculated in accordance with 35 Ill. Adm. Code 218.411(a)(1)(B).
- 8. The Permittee shall maintain monthly records of the following items:
 - a. Names and amounts of inks, fountain solutions, coatings and cleaning solvents used (gallon/month);
 - b. VOM and HAP content of materials in item (a) (lb/gallon or wt. %);
 - The number of days during that calendar month that lithographic printing lines were in operation;
 - d. VOM emissions calculations for lithographic printing presses to demonstrate an exemption level of the daily VOM emissions performed pursuant to the procedures of Section 218.411(a)(1)(B) (no VOM retention of cleaning solvents is allowed); and
 - e. Total VOM and HAP emission calculations (tons/month and tons/year).
- 9. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.
- 10. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
- 11. Pursuant to 35 Ill. Adm. Code 218.411(a)(3), the Permittee shall notify the Illinois EPA in writing if the combined emissions of VOM from all lithographic printing lines (including inks, fountain solutions, varnish, and solvents used for cleanup operations associated with the

lithographic printing lines) at the source ever exceed 100 lbs/day, before the use of capture systems and control devices, within 30 days after the event occurs. Such notification shall include a copy of all records of such event.

12. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency Division of Air Pollution Control Compliance Section (#40) P.O. Box 19276 Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency Division of Air Pollution Control 9511 West Harrison Des Plaines, Illinois 60016

It should be noted that the comfort heaters and hot water tanks, metal buffing machine, platemaker and image setter, and drying oven are exempt from state permit requirements, pursuant to 35 Ill. Adm. Code 201.146(c, d), (aa), (ll) and (fff), respectively.

If you have any questions on this, please call Randy Solomon at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:RBS:jar

cc: Illinois EPA, FOS Region 1 Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the printing facility operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. This is handling 48,000 lbs of VOM total for all materials. The resulting maximum emissions are below the levels, e.g., 100 tons per year of VOM, 10 tons per year of a single HAP, and 25 tons per year of combined HAPs at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled and control measures are more effective than required in this permit.

		HAPs	
	VOM	Combined	Single
<u>Operation</u>	(Tons/Year)	(Tons/Year)	(Tons/Year)
Printing, Coating and Cleaning	24	< 25	< 10

RBS:jar